

**REMARKS:**

Claims 1-9 are in the case and presented for consideration.

The Office has objected to the abstract. Applicant has deleted the original abstract and provided a new abstract to ensure that only proper language and format is used. The new abstract, which accompanies this amendment on a separate sheet, is in compliance with 35 C.F.R. §1.72(b) and MPEP §608.01(b).

The Office has objected to the arrangement of the specification. Guidelines for the preferred layout have been suggested. Applicants respectfully decline addition of headings, as they are not required in accordance with MPEP §608.01(a).

Claims 1 and 5 were rewritten to clarify that the correcting step comprises "multiplication of a three color signal matrix containing the first, second and third basic color signals (R, G, B) by a correction matrix containing RGB matrix coefficients." Claims 1 and 5 were rewritten only for clarification. This change is not required to overcome the prior art or any other statutory reason. For this reason applicants are entitled to a full scope of protection for rewritten claims 1 and 5, including any judicially created doctrines such as the Doctrine of Equivalents.

The Office has rejected claims 1-3, 5-7, and 9 as anticipated by PCT Publication WO 99/04555 to Jaspers et al. (hereinafter referred to as Jaspers et al.).

Applicant initially notes that the Office has not considered several recited elements or limitations of the claims. Claim 1, for example, recites:

correcting (9) the basic color signals to obtain standardized signals, the correcting step comprising multiplication of a three color signal matrix containing the first, second and third basic color signals ( $R$ ,  $G$ ,  $B$ ) by a correction matrix containing  $RGB$  matrix coefficients that depend on the analog preprocessing step (2, 3).

The Office has not addressed or explained how the prior art teaches obtaining "standardized signals," or a correcting step of "multiplication of a three color signal matrix containing the first, second and third basic color signals ( $R, G, B$ ) by a correction matrix." The Office only refers to Fig. 8 for matrix correction in general, without even explaining which element of the prior art corresponds to the claimed matrix correction. Nor does the Office address or explain how the prior art teaches or suggests a correction matrix containing coefficients, which depend on the analog preprocessing step. As the Office is no doubt aware, all limitations of a claim must be considered meaningful, and, "the PTO must consider all claim limitations when determining patentability of an invention over the prior art." *In Re Lowry*, 32 USPQ2d 1031, 1034 (Fed Cir. 1994). If this response does not place the case in condition for allowance, then applicant respectfully requests the Office to address each and every limitation of the claims so that the Office clearly satisfies its burden of establishing a lack of novelty, and so that the Office's rejection may be better understood.

Nevertheless, applicant respectfully traverses the Office's rejection for the following reasons.

First, claim 1 recites the step of "converting (5) the analog preprocessed signals into digital signals" followed by the step of "reconstructing (7) a first basic color signal ( $R$ )." Although Jaspers et al. points out that white balance correction can be effected in the analog signal path of the A/D conversion circuit, it does not expressly indicate whether reconstruction of the first basic color signal is effected in the analog signal path or digital signal path. If the Office is using personal knowledge or an assumption as the basis for rejection, the Office should fully explain.

Next, the Office states that "white balance correction . . . is performed prior to reconstruction of red, green, and blue colors (p. 7 lines 23-24), and is followed by matrix correction of these colors. (fig. 8)." Applicant respectfully disagrees with the Office's logic for the following reasons.

Page 7, lines 23-24 describe that white balance correction WBC is performed before the reconstruction of the RGB colors," and that "reconstruction of the RGB colors is carried out in a processor PROC which interpolates the RGB output signals." Fig. 6A, which corresponds to this text, shows the WBC preceding the PROC. Neither Fig. 6A, nor the text on page 7, mention matrix correction.

Fig. 8, which discloses a completely different invention from Fig. 6A, shows the WBC following the PROC. The RGB input signal is applied to a processor PROC' which carries out the RGB reconstruction first. (page 11, line 34; page 12, line 1). The red and blue signals, and the Boolean falsecolor from the processor PROC' are applied to a false color killer circuit FCK to obtain a corrected red signal R' and a corrected blue signal B'. (page 12, lines 2-4). Then, the corrected signals R' and B' are applied to the white balance control circuit WBC. (page 12, line 5). Thus, according to the embodiment shown in Fig. 8, the RGB signal is reconstructed and corrected before white balance correction.

Since Figs. 6A and Fig. 8 show different inventions, there is no basis for the present novelty rejection under 35 U.S.C. 102. Neither Fig. 6A alone, nor Fig. 8 alone teaches each element and limitation recited in claim 1. The text describing Fig. 6A and Fig. 8 never states that any correction described in Fig. 8 can be applied to the process of Fig. 6A. Since Fig. 8 teaches a process which is opposite to the process in Fig. 6A,

there is no basis for assuming that any part of the invention of Fig. 8 is a part of the invention of Fig. 6A without an explicit indication.

Furthermore, as explained above, it is not clear what the Office deems to be a correction matrix in Fig. 8. If the Office deems the FCK circuit to be a correction matrix, then applicant notes that no correction of the green signal is made. Thus, the step of "correcting (9) the basic color signals" wherein the basic color signals are recited as red, blue, and green, is not taught or suggested. Also, there is no indication that the FCK circuit is any type of correction matrix. There is no indication that the FCK circuit involves any type of matrix array.

Page 12, lines 6-8 also discuss inserting a color matrix B (with coefficients b11 thru b33) between the PROC' and the FCK. If the Office deems this color matrix to be a correction matrix, then applicant notes that matrix coefficients b11 thru b33 form the inverse matrix coefficients of the RGB matrix coefficients.

Finally, applicant traverses the §102 rejection because WO 99/04555 to Jaspers et al. clearly fails to teach or suggest at least one element or limitation recited in the claims. Rewritten independent claim 1 recites:

the correcting step comprising multiplication of a three color signal matrix containing the first, second and third basic color signals (R, G, B) by a correction matrix containing RGB matrix coefficients that depend on the analog preprocessing step (2, 3)

Jaspers et al. does not teach or suggest multiplication of a three color signal matrix containing three basic color signals by a correction matrix. Instead, on the bottom of page 8 and continuing to page 9, Jaspers et al. teaches matrix multiplication of the

inverse matrix coefficients of the RGB matrix coefficients by 1. Jaspers et al. does not teach or suggest any other type of matrix multiplication.

In addition, although it is not required to distinguish the presently claimed invention from the prior art, applicant notes that claim 1 now recites a correction matrix containing RGB matrix coefficients. Jaspers et al. does not teach or suggest a correction matrix containing RGB matrix coefficients. Jaspers et al. only teaches inverse matrix coefficients of RGB matrix coefficients.

Claim 5 recites a device with substantially the same elements and limitations as claim 1. Therefore, claim 5 and dependent claims 6-9, are believed to be patentable for at least the same reasons as claims 1-4.

Accordingly, the application and claims are believed to be in condition for allowance, and favorable action is respectfully requested. No new matter has been added.

If any issues remain which may be resolved by telephonic communication, the Examiner is respectfully invited to contact the undersigned at the number below, if such will advance the application to allowance.

Respectfully submitted,



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